

because of the importance of certain human activities, such as land use change, in accentuating geomorphic hazards. But, there is little here to satisfy the disaster specialist. Indeed, the term "disaster" is indexed solely for the two chapters concerned with volcanic events. However, the book is effective in illustrating hazard-related methodologies, including the use of resident oral histories to detect environmental changes in a remote area of British Columbia, as well as the potential application of more conventional geomorphological tools, such as mapping and modelling, in hazard management.

The practical aspects of risk assessment and hazard management are developed in a rather patchy fashion. For example, they are given little attention in a clutch of papers dealing with soil erosion, although an interesting account of water erosion in the Cape Verde Islands links gully incision on the volcanic slopes to the Sahelian drought, as well as to

unwise agricultural practices, and makes the point that remedial measures are heavily dependent on external aid. On the other hand, two papers dealing with volcanic hazards on Mt Pinatubo, the Philippines, and Mt Unzen, Japan, are good examples of how risk zonation surveys can lead to disaster mitigation strategies.

In summary, this volume is a welcome step forward. It also provides a useful signpost for a road along which more geomorphologists will undoubtedly travel in future. The editor has done a commendable job in assembling a set of papers of a high standard and the book is attractively published at a hard-back price which is not unreasonable in today's market.

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SOIL AND WATER MANAGEMENT SYSTEMS fourth edition, by G. O. Schwab, D. D. Fangmeier and W. J. Elliott, John Wiley & Sons Inc., New York, 1996. No. of pages: xii+371. Price: £24.95 (hb). ISBN 0-471-10973-8.

The agricultural engineering curriculum in universities and colleges in the USA has traditionally encompassed soil and water engineering. Student needs for a basic text to accompany their courses have been met for many years by the text on *Soil and Water Conservation Engineering*, first published in 1955 under the editorship of R. K. Frevert. A simpler version was produced for use at college level under the title *Elementary Soil and Water Engineering*. This fourth edition of the latter text, under a new title and new authorship, reflects changes in emphasis in the discipline from engineering to management, and from agricultural to broader environmental issues. A more interdisciplinary approach is

adopted, combining engineering, agronomy and biology. Those who are familiar with earlier editions will see that the authors have retained the clear, logical presentation of problems and design procedures. Good use is made of diagrams, nomographs, tables and worked examples. A glossary of essential terms is also provided. The material covers surveying, soil erosion and conservation, water quality, water storage, drainage and irrigation. For those seeking a compromise between an engineering manual and an academic text covering principles but with little practical information, this is ideal. Unfortunately, it remains targeted at the American market. All the information relates solely to the USA and Imperial units are used throughout instead of SI.

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